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AMERICAN NURSERYMAN

Chief Exponent of the American Nursery Trade

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AMERICAN NURSERYMAN

Chief Exponent of the Nursery Trade

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EDITORIAL communications on subjects connected with nurseries, arboriculture or other phases of commercial horticulture are welcomed by the editor. Also articles on the subjects and papers prepared for conventions of nursery associations.

ORGANIZATION WILL HELP.

An interesting contrast is presented in this issue of The American Nurseryman, because a Wisconsin leader in the trade presents a picture of the effects on the industry of its current disorganization and the lack of any approach to uniformity in price levels, while on another page is reported the organization of a cooperative body in Colorado which is to combat that very condition.

By this time it is apparent that the year's effort of the national planning committee has come to nought, because the code which was drafted has been shelved and the marketing agreement gathers dust somewhere in the Department of Agriculture at Washington. The provisions as to hours and wages of labor which form a necessary part of a code seemed unsuitable to the nursery industry, acknowledged as a branch of agriculture. Under the agricultural adjustment act, the marketing agreement must have embodied in it a price plan, but that submitted at the New York hearing last July has been heard of no more since it went to Washington with the Department of Agriculture officials.

The Mirror of the Trade

The solution to the problem seems to be coming out of the west. In the northwest was evolved a cooperative marketing agreement under state law, adopted first in Washington and then in Oregon. It is under consideration in California, and something similar, or perhaps more stringent, will be effective under the Colorado organization. In the southwest is a cooperative association taking in more territory, seeking a remedy to current ills on a plan not greatly dissimilar.

In view of the inability of the trade to arrive at any nation-wide agreement, these state or sectional cooperatives probably provide the best means of meeting the situation, at least for the time being. Possibly they will be extended or copied from state to state until the effect is national.

Of course, an organization covering the entire country, which might unify the steps being taken, would be of high service. The committee having in hand the revitalization program of the American Association of Nurserymen may well give this consideration. A more firmly knit industry is greatly to be hoped for, with resultant profit to nurserymen and better satisfaction to the public.

THE WORLD'S FAIR CLOSES.

With the passing of October, A Century of Progress exposition at Chicago closed forever, as the placards had announced. Remarkable in a good many ways, this world's fair was particularly interesting to trade and public alike on account of the extent of its horticultural displays. This included not only the exhibits housed in the Horticultural building and in the adjacent gardens, but also the plantings of the grounds generally and of the areas devoted to individual exhibits.

It is stated that one out of every ten persons who went to the fair visited the Horticultural building, a record achieved by few concessions on the grounds. The florists, nurserymen and seedsmen who had a share in this feature may well be proud of the display

of horticultural products made and of the interest they aroused.

But every visitor to the fair, whether he visited the Horticultural building or not, could only be impressed by the plantings which were almost everywhere along his way through the grounds. The fact that these plantings endured for a season or for two seasons on an island of pure sand sucked from the bottom of the lake must have given many persons thought. The effect was a testimonial to suitable planting, proper care and selection of plants, possible by those versed in horticulture.

PATENTED PLANTS.

So far as is known, there has not yet been prosecuted a case alleging violation of the plant patent act, which, since 1930, provides to developers and discoverers of new varieties of plants exclusive rights for seventeen years to reproduce and sell their creations. Since plant patents have been available 108 have been issued by the Patent Office at Washington, D. C.

Because the privilege of patenting plants is comparatively new and the majority of patented plants have not been in the hands of the trade for long, there have been few complaints regarding violation of the act. Recently, however, a number of violations have been reported. Most of these, probably, have been committed because of a lack of understanding on the part of purchasers of patented plants, but some violations are made by those who wilfully attempt to evade payment of royalties to the grower to whom a plant patent has been issued. All growers should know that a violation of the provisions of the plant patent act opens the door to legal difficulties.

C. B. MILLER, of the Milton Nursery Co., Milton, Ore., was the principal speaker at a recent luncheon of the Milton-Freewater Rotary Club, giving an account of his travels from last May until August in the eastern and middle western states.

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AMERICAN NURSERYMAN

[Registered U. S. Patent Office]

The Chief Exponent of the American Nursery Trade

*The Nurseryman's Forte:
To Make America More Beautiful and Fruitful*

Vol. LX

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No. 9

Packing Perennial Plants

W. A. Toole Gives Practical Advice on the Preparation of Plants for Shipment, from Knowledge Gained in Long Experience

It is a pleasure to receive a letter from a distant customer saying: "Your plants arrived in perfect condition and never knew they had been moved." Such expressions of satisfaction are ample repayment for all efforts expended in properly packing shipments. Because of the varying nature of the different types of perennials, as well as varying weather conditions, however, packing perennials successfully for long-distance shipment presents many problems.

Dormant plants that have ripened back to one or more eyes or buds, having no green top growth, are the simplest to handle, because there is no succulent matter to heat and rot with close packing and evaporation of moisture is slight. For retail shipments of one or a few of each of several different varieties, the simplest way to handle dormant roots is to attach a wired wooden tag to each root, with the name written or printed legibly on the label. A flexible waterproof cardboard band passed around a root or stalk, with one end pushed through a slit at the other end, also makes a practical and cheap label. Dormant roots may be packed solidly in a box or carton, any spaces being filled with lightly moistened shingle tow, sphagnum moss or pulverized peat.

Prevent Damage from Shifting.

If there is a quantity of one variety, one label may suffice for all the roots of that variety. The label should be fastened to the root that will probably be unpacked first. It is essential in bulk packing that different varieties be clearly separated by several thicknesses of newspaper or a single thickness of heavier packing paper. Finally, the box or package should be filled snugly with excelsior or other packing material, to prevent shifting of the roots.

For shipments of plants with leafy tops, more careful packing is needed. A general rule to follow is, keep the tops dry and the roots relatively moist.

For shipments of but one or a few plants of a variety, I use a wrapping of a lightweight, waxed, kraft-type paper. This is both tough and waterproof. To save shipping charges, most of the soil is removed from the roots. If the roots are unusually dry, they are dipped or sprinkled, but wetting of the tops or crowns is carefully avoided. Damp sphagnum moss is placed around the roots, and the plant or plants are rolled

in the waxed paper, usually so that part of the tops is left exposed. Excessively leafy or branched tops are cut back somewhat, depending on the type of growth of the variety and the season of the year.

Fastening the Package.

After wrapping, the package is held together with a rubber band, if not too large, or with twine in the case of heavier packages. No. 11 or 12 size rubber bands are adequate. If the label is placed on the outside of the package, under the fastening, the customer may check or sort the plants without undoing the packages. A customer may not be conscious of these little things, but such small matters often help to leave a favorable impression. Either waterproof cardboard or ordinary pot labels may be used, only be sure the label is legibly written. Do not use an indelible pencil or a pen to write labels. The moisture quickly makes them unreadable. A painted wooden label will remain more legible under handwriting if there is much dampness.

For bulk shipments, the plants may be set upright in the container, with damp moss between the roots. A wooden cleat nailed across the box occasionally will prevent shifting. Except in hot or damp weather, most plants can go forward with solid packing in moderate-size containers. The roots can be kept moist with moss, while the tops are given air by the liberal use of excelsior. Both moss and roots may be drier when packed solidly in a box than when the tops have more exposure to air. Bulk shipments of such plants as strawberries and many perennials are often packed in slatted crates by overlapping the roots in the center, with alternate rows of the tops against opposite sides of the container.

Difficult Plants.

Such items as *Pyrethrum roseum* and oriental poppies with some top growth and other varieties that rot easily must be handled with care in packing. If packed in small bundles, with excelsior around the crowns of the plants, and if the bundles are packed in well aired containers, difficult plants will usually travel safely.

Bulk shipments of several varieties in one container must be clearly separated and marked to prevent confusion and

mixing when unpacked. This is most essential when packing varieties of the same species or similar-appearing species. If several wrapped bundles of one variety are included in a shipment, each bundle should be labeled to prevent uncertainty when they are unpacked.

Small Items.

For seedlings, rooted cuttings or small lining-out stock, a satisfactory way of handling is to lay out a strip of wrapping paper of handy size, spread on it a thin layer of moss and then a row of plants one layer deep, with the tops extending slightly beyond the paper. Another thin layer of moss is then spread over the roots, after which the lower half of the paper is turned up over the roots. Beginning at one end, the row of plants is quickly rolled into a handy package, which leaves a layer of paper between the plants. A thin layer of excelsior laid along the tops before rolling is an added protection against possible rotting. Fastening with a rubber band or twine and labeling complete the package, which may then be packed as the size of the shipment and the nature of the plants seem to demand.

Pot-grown Stock.

Potted perennials, shifted to paper pots, can be shipped quite safely in boxes or crates with slatted tops. Besides providing ventilation, the slatted tops permit the agent of the carrier to see that the package should be handled carefully. If they are packed snugly and cleated in, it will not be necessary to wrap the pots.

No matter what the method of packing, the plants must either be cleated in to prevent shifting or packed solidly by the liberal use of excelsior or other material so they cannot shift about and become battered. Loose packing is probably the greatest cause of difficulty in shipping plants.

Perennials out of pots can usually be handled much the same as field-grown stock. For distance shipments, weight can be saved by rubbing off the shoulder of loose soil that often exists above the root ball.

Containers for shipping are so many and varied that no positive recommendations may be made. For one or a few plants, a cardboard roll is both lightweight and handy. Small cardboard or corrugated board boxes will be found

useful for small shipments. For heavier shipments, cartons, wooden boxes, crates, baskets and special packages are all practical, depending on the nature of the plants, price of the container and distance to be shipped.

At present, secondhand cartons, orange or apple boxes and many other types of containers are much used as a matter of economy. These are all serviceable, and if only sound cartons or re-nailed boxes are used, they serve the purpose of carrying the plants to their destination, but lack the attractive, neat appearance of a new container.

Much about packing plants will have to be learned by experience, observation and complaints from customers. Such complaints, while unpleasant, are the surest indicators of wrong methods. A complaint from a customer, I believe, merits sincere thanks, an immediate refilling of the order and prompt investigation of packing methods.

CENTRAL CALIFORNIA GROUP.

J. R. Crombie, of the Crombie Nursery, Oakland, Cal., was elected president of the Central California Nurserymen's Association at the annual meeting of the organization held October 16 at the States restaurant, San Francisco, Cal. W. B. Clarke, of W. B. Clarke & Co., San Jose, was elected vice-president, and Mr. Wallace, of the Leonard Coates Nursery, San Jose, was elected secretary-treasurer.

IDAHO NURSERYMEN AT MELBA.

At a meeting at Melba, Ida., September 22, the Idaho Nurserymen's Association adopted the open price plan. The Idaho state code adopted last spring will be presented to the state legislature for the approval of the enforcement angles and the legislature will also be asked to put through a lien law for nurserymen and to make changes in the laws to give the nurserymen better protection from the state horticultural department.

The following committeemen were appointed: Publicity, C. S. Randall, Twin Falls, and C. C. Minden, Nampa, and legislative, Everett O. Nord, Boise; Anton Dedereichsen, Payette, and Loyd Wright, Kimberly.

MARYLAND NURSERYMEN MEET.

The annual meeting of the Maryland Nurserymen's Association was held Thursday evening, October 25, at the Hotel Rennert, Baltimore, Md. Preceding the general meeting, the executive committee convened for dinner at the hotel. The executive committee is composed of Jesse King, Mount Airy; Elliott Wheeler, Canterbury Nurseries, Easton; Julian J. Chisolm, Jr., Garrett Park; Frank Primrose, Loudon Park Nurseries, Pikeville; Henry J. Hohman, Kingsville Nursery, Kingsville, and W. C. Price and W. B. Garrett, Towson Nurseries, Towson. All were present except Mr. Wheeler, who was detained through business engagements.

At the general meeting, at which Jesse King, president of the association, presided, discussion took place as to the advisability of a spring flower show in 1935. A committee was appointed to meet with Dr. Symons, of College Park,

and a committee from the Baltimore Florists' Club.

Dr. Thurston, of College Park, reported on the arboretum to be established at the University of Maryland. Interest in this project has been general, with contributions of more than 800 plants in nearly 500 varieties. The Boyce Thompson Institute for Plant Research, Yonkers, N. Y.; Masonic Home, Elizabethtown, Pa., and the Arnold Arboretum, Boston, Mass., have taken part in these contributions. W. C. Price and Adolph Gude were appointed to head committees investigating plantings in nurseries and forestries in Maryland.

Henry J. Hohman brought up for discussion the matter of municipal contracts for city and state planting. A resolution was presented by Mrs. Andrew Simon, Towson, in behalf of Miss Elizabeth Clark, asking coöperation of Maryland nurserymen in the prevention of waste in the wild flower kingdom. The meeting adjourned to convene again at the time of the nurserymen's short course, in February, at the University of Maryland.

AMERICAN NURSERYMAN

ADOPT OREGON AGREEMENT.

A marketing agreement along the lines of the one recently put into effect in Washington was adopted by the nursery trade in Oregon early last month. The meeting at which the agreement was ratified was held at Salem, Ore., and drew an attendance from all over the state of seventy-five.

Administration of the agreement will be by a commodity committee, which will also set up prices and grade standards. Election to the governing committee will be by districts, of which there will be seven in the state, each to have one representative. The following representatives have been named: W. E. McGill, Fairview; B. A. Mitchell, Orengo; Pearcey Knight, Salem; C. D. Hobbs, Milton; C. E. Moyer, Roseburg; Roy Woodruff, Eugene, and C. Guignard, Hood River.

FRANK MCKINNEY, nurseryman of West Lawn, Pa., recently talked on "Winter Protection for Roses" before the members of the Reading Rose Society, Reading, Pa.

Colorado Co-operative

Nurserymen of Western State Organize for Control of Prices and Production

Colorado nurserymen have formed a coöperative association by the filing of papers creating the Colorado Nurserymen's Coöperative, Inc., and simultaneously dissolving the Rocky Mountain Nurserymen's Association.

Eleven of the leading firms of the state, representing eighty per cent of the nursery acreage in Colorado, at a general meeting on October 8 signed contracts pledging themselves to a production and price-control program identical in structure with the plan of the Colorado Flower Growers' Coöperative.

Carlyle Ferguson, Denver, was elected president, and John T. Roberts, Jr., Denver, who is president of the Colorado Flower Growers' Coöperative, was named vice-president. The secretary of the association is Charles C. Wilmore, Denver. The other directors are E. J. White and G. A. Tollison, Wheatridge; Glen Klinghorn, Fort Collins, and A. R. Langman, Colorado Springs.

Bids as Body.

The first demonstration of organization effectiveness came on October 13, when the Colorado Nurserymen's Coöperative was announced as the successful bidder on the first roadside improvement project in Colorado, which will be undertaken on the Denver-Colorado Springs highway south of Littleton and calls for 12,500 trees and shrubs. The bid was \$5,600.

"We bid on this project as a group," said Mr. Wilmore, "but each member will receive his share of the work and each firm will make a profit. We shall subsequently offer bids as a coöperative on two-thirds of the \$30,000 which is allocated to Colorado by the government for roadside improvement."

Within two weeks the organization's price stabilization structure will be

completed and put into effect. "The coöperative will control both wholesale and retail minimum prices," declared Mr. Wilmore. "Absolute control of production and marketing is placed in the hands of the board of directors and prices will be fixed on a basis of what is fair to the producer and consumer."

A complete survey of all nursery acreage and stock of the members will be undertaken at once, and the inventory will be repeated each year. A member's acreage cannot be increased without his giving the board of directors opportunity to consider it.

Follows Flower Growers' Plan.

Requests for membership in the association, which is organized under the marketing laws of the state, are coming in so rapidly, according to Mr. Wilmore, that the organization expects within the next few weeks to be as representative of the nursery producers of Colorado as the Flower Growers' Coöperative is representative of the flower producers of the Denver area, or ninety-nine per cent.

Control of independents or nonmembers is secured by a ruling that they cannot buy from or sell to members of the group.

The nurserymen are relying upon Vice-president Roberts to help in getting the coöperative functioning quickly and efficiently with his experience in meeting the flower growers' problems. The office force of the Flower Growers' Coöperative will also aid the preparatory work. The board of directors will meet twice a month in Denver to administer the affairs of the coöperative, and the new organization is immediately to apply for membership in the American Association of Nurserymen.

Can Organization Help Nurserymen?

A. C. Hanson, Vice-president of the Hawks Nursery Co., Wauwatosa, Wis., Appeals to Leaders to Guide Trade from Limbo of "Forgotten Men"

This article is written in the belief that our good President is trying to do everything possible to correct business evils, as well as to aid the acute distress existing under the present economic disturbance.

Everyone knows that there is something out of balance and radically wrong, but no one seems to have a remedy. I am speaking as one of many thousands unfortunately engaged in the retail nursery business. I have heard many speakers talk. I have read many articles about the "changing order of things." I have watched carefully the enactment of this code and that code as it affects other lines of business, the N. R. A. and all that goes with it, and am still wondering what has been done to help the nursery business and retail dealers in particular.

I have listened at the radio to some very fine talks on the part of the President and have heard him say he was bending every effort to correct many business evils and have heard him lay particular stress upon the importance of providing work for the unemployed. And also that every business should be able to pay a living wage and every industry earn a fair profit. In other words, if ninety out of a hundred men in a given line are good boys in playing the game, the other ten, by unethical practices, price cutting and ruthless methods, should not spoil the work of the ninety.

This is fine so far as it goes, because no person in his right mind could complain about a program of that kind. We nurserymen, in particular, would welcome that plan.

Government Bids.

Now, then, it does seem to me that if the objective governmental control is striving for is a living wage, jobs for everybody and a fair profit for industry, the federal government should show leadership and set an example of the very thing it is asking private business to do.

To illustrate what I am driving at: Here in this city two hardware merchants were asked to bid on C. W. A. equipment. These two merchants were struggling in the backwash of the depression, at least one considerably in arrears in taxes. The two competitors agreed to bid on one-half of the material called for, and in bidding used the figures given them by two of the largest wholesale hardware firms in the state. Did they get the business? They did not. The very firms which gave them figures to bid with themselves submitted bids lower than their dealers' and were given the orders in spite of the fact that the local dealers expected only to obtain a low margin in the way of a trade discount.

This is only one instance of thousands typical of the policy pursued by the federal government in making its purchases.

How has it affected the nursery business? How many of you retail nurserymen know of a single legitimate dealer who bid on federal work in his district

that got one nickel's worth of business?

In one case upstate three firms were less than \$17 apart on a \$510 material job which would have netted about twelve per cent gross profit if one of the three had got the order, and yet it went to a Chicago firm at a price much below the actual cost of the three Wisconsin bidders.

Another federal project in the southern part of the state, according to reliable information at hand, went to a bidder whose figure was away below the actual cost, taking an average of four legitimate bidders all from Wisconsin. Now, what encouragement is there for a retail dealer when the federal government demands and insists upon rigid inspection, and a job involving \$1,200 to \$1,500 is let to a bidder several hundred dollars below the cost figures of the others?

Information from a reliable concern sets forth that in Illinois, on a highway project, 2-inch American elm trees were offered last spring as low as 40 cents each. And from another concern comes information that, at a southern point, trees were offered by a nurseryman as low as 10 cents each if those in charge of the project would come in and dig the trees.

These examples are only a few of a great many that have come to my attention, and doubtless to yours, also. Now, couple this up with the unheard-of and unbelievable bargains that are being offered over the radio and from other sources. Just what is the answer and where is the trail leading?

Merit Part in Agricultural Relief.

Superhuman efforts have been made on the part of the government to stabilize the farming industry, while, after all, the nursery business might be called agricultural, too. There are many thousands of people engaged in the nursery business whose livelihood depends wholly on some kind of fair return from their investment and their individual effort. Now, it does seem to me that we, as nurserymen, are drifting into the class known as the "forgotten men." I say now, as I have said many times, there must be somewhere in our group men big enough, brainy enough and strong enough to organize and do something to save what is left of a one-time flourishing business.

It is clear to any thinking person that the problem of the nurseryman is a difficult one. We have ever in the forefront the human element of jealousy and the desire for self-preservation.

Zone Control.

Climatic conditions in this country differ radically from section to section. It is not easy, therefore, to reconcile all of these conditions except by some sort of zone control. Last spring we in Wisconsin had local meetings and state meetings, and there have been national meetings. We heard a great deal about the open price plan, about a code, about some kind of arrangement that would set a minimum price to the end that the wholesaler with a surplus could not chisel on

the retailer and the retailer could not invade the legitimate field of the wholesaler. That program evidently is in a profound sleep somewhere. I feel very strongly that if the program set up in Detroit two or three years ago for a complete national retailers' association had been put through we should today have the working nucleus of a real, fighting organization.

Now comes the aftermath of the most destructive nation-wide drought this country has ever known. It is going to hurt many, both in the wholesale and retail business, but it may be termed an act of Providence or just one of the peculiar ramifications known as "nature's balance." It may serve a good purpose in getting away from the bugbear of overproduction, and some sort of growing control may eventually come out of it.

This, in some measure, reflects my thoughts, and I am hoping there are others who are not too dead to think or too tired to fight who will come to life and, through the columns of this paper, see if we cannot revive a fighting spirit and put forth a united effort toward bettering ourselves and, incidentally, your job and my job.

OPEN BOSTON SCIENCE COURSE.

The opening lecture in the science course for gardeners sponsored by the National Association of Gardeners, with the Massachusetts Horticultural Society cooperating, was held October 17 at Horticultural hall, Boston, Mass. Forty-nine students were present. Since then, the secretary has received a number of additional registrations. Raymond Smith, a graduate of Massachusetts State College, is secretary and registrar.

John Doig, chairman of the Boston branch of the National Association of Gardeners, opened the first session by outlining briefly the aims and ideals of this new activity of the association. He then introduced Arno H. Nehrling, director of the course. Mr. Nehrling stressed the importance of scientific training and gave a résumé of the various subjects that are to be considered in this 2-year course. He stated also that the lectures will be given by the best men available in the territory. A certificate will be awarded those who complete the course. The first-year course will deal with systematic botany.

Mr. Nehrling introduced Dr. Edwin J. Haerli, who will give the first eight lectures. Dr. Haerli graduated from Massachusetts State College, received his master's degree at Williams College and his doctor's degree from Harvard University. He has been on the teaching staff at Williams, Harvard and Radcliffe colleges. Instructors for the courses to follow will soon be announced. The Massachusetts Horticultural Society is placing at the disposal of the class its lecture rooms, library and all other available equipment.

Questions regarding the course may be addressed to Raymond E. Smith, 44 North Andover street, Lawrence, Mass., or Arno H. Nehrling, director, Horticultural hall, Boston, Mass.

Plan A. A. N. Convention

Heads of Committees Named to Prepare for National Gathering in 1935 at Cincinnati

Although official appointments to the local committees to be concerned with the arrangements of the annual convention of the American Association of Nurserymen to be held at Cincinnati, O., next July were not made until recently by President Lester C. Lovett, advance activities have been in progress for about two months.

Herman Brummé has been named general chairman of arrangements, with W. A. Natorp honorary chairman of committees for the convention. Other committee heads are as follows: Entertainment, Peter Cassinelli; house, William A. Natorp; transportation, Robert DuBois; decoration, Carl E. Kern; display, George Kern; program and trade space, E. A. Smith; secretary of convention, E. A. Smith; ladies' entertainment, Mrs. W. A. Natorp; publicity, T. B. Medlyn; registration and welcome, A. L. Heger, and advisory, C. O. Siebenthaler, W. W. Hillenmeyer and Ollie Hobbs.

Regular Meetings Scheduled.

The next meeting of the local group will be Monday, November 5, and other meetings will be held every two weeks thereafter until the three months preceding the convention, at which time the sessions will be more frequent. An outline of the program has already been developed, and definite announcements will be made as soon as the names of the speakers have been confirmed.

It is planned to devote a considerable part of the program to the work of the revitalization committee, because it is felt that nurserymen throughout the country are eagerly looking forward to the report of the progress made by this group.

Also being considered is a large trade exhibition space. The present idea is to have this located in such a way that it will be impossible for any person to get into the convention hall without passing

all the exhibits. It is felt that the exhibitors are entitled to such consideration from the members at the convention.

W. A. Natorp, Cincinnati, who was named honorary chairman of the convention committees, will cooperate with Mr. Brummé in the direction of the activities of the various groups. As president of the W. A. Natorp Co., which specializes in landscape designing, Mr. Natorp holds a prominent position in the trade. His firm, in which Thomas B. M. Medlyn is vice-president and secretary, operates in excess of 100 acres, with nurseries on Reading road, Montgomery road and Madisonville road in the Cincinnati area. Besides a general line of nursery stock, perennials and alpine, along with some greenhouse items, are featured. A retail store is conducted also.

Brummé Convention Head.

Heading the arrangements committee for the 1935 convention of the A. A. N. at Cincinnati, O., is Herman Brummé, vice-president of Cassinelli & Brummé, Inc., Cincinnati.

Mr. Brummé is a graduate of the University of Copenhagen in Denmark. He came to this country in 1920, later becoming an American citizen. His first position here was with Wadley & Smythe, in New York. With this firm, under the direction of Alfred Beaujean at The Yonkers Nursery, Inc., Yonkers, Mr. Brummé received tuition in the practices of the trade in this country and developed, also, the necessary familiarity with the language.

After working for Wadley & Smythe about a year and one-half, Mr. Brummé decided that he wished to see the country and broaden his experience in the profession. He traveled about for some time, in the early part of 1927 going to Cincinnati. There, Mr. Brummé and Peter Cassinelli, who had been in business in that city since 1918, organized the firm of Cassinelli & Brummé, Inc., offering a complete landscape service, with Mr. Cassinelli as president and himself as vice-president.

Cassinelli & Brummé, Inc., does work over the entire country. Some of its most recent projects were the landscaping of the new Cincinnati union terminal, the new state office building in Columbus, O., and an 18-acre plot about the United States Marine hospital, New Orleans, La. Besides being a member of the American Association of Nurserymen, the firm is affiliated with the Ohio Association of Nurserymen and the Cincinnati Association of Landscape Architects.

FREIGHT RATE FIGHT.

Field Hearings Scheduled.

As a result of efforts made at a recent hearing in Washington, D. C., before the Interstate Commerce Commission, meetings are shortly to be held in various cities throughout the country at which shippers will have opportunity

to cross-examine the carriers and protest the general increase in freight rates being asked, amounting to about ten per cent. One of the regional hearings will be held in Chicago on November 16, when representatives of the American Association of Nurserymen expect to present witnesses and data in opposition to the rise requested.

This matter is of considerable import to the trade as a whole and therefore deserves not only the support of all members of the A. A. N., which is representing the trade in the opposition fight, but the cooperation of all who ship nursery stock. Ways in which they can assist are suggested by Charles Sizemore, Louisiana, Mo., secretary of the A. A. N.

Data Asked.

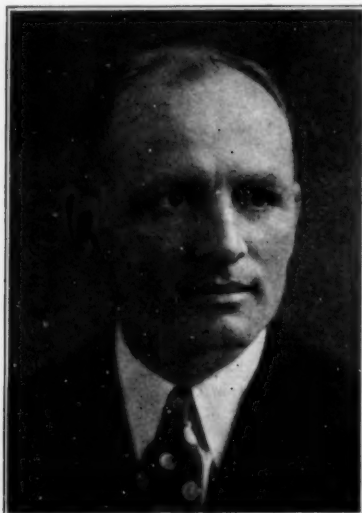
All nurserymen are particularly asked by Secretary Sizemore to advise his office what percentage of their business goes beyond 220 miles from them and to list a dozen or more points to which they ship beyond the 220-mile radius. This information is important, because the carriers apparently consider that truck competition is strongest within distances of 220 miles or less and that beyond that most of the business goes by rail anyway. Therefore, the increase in rates for distances 220 miles and further will be greater than for distances under 220 miles.

It is planned to use several nurserymen as witnesses at the Chicago hearing; therefore each member of the association is asked to contribute \$2 or more to defray the expenses. Sending the money and data should be done as promptly as possible.

Hearing Report.

Because of a foot lameness, Secretary Sizemore was unable to attend the Washington hearing. Instead, Brainerd W. La Tourette, attorney at law and traffic counselor, of St. Louis, Mo., represented the association at the capital. Mr. La Tourette ably assisted Secretary Sizemore several years ago in the fight

(Concluded on page 15.)



Herman Brummé.



William A. Natorp.

New Medium-Size Shrubs

L. C. Chadwick Describes Varieties of Deciduous Shrubs
Growing from Six to Ten Feet High Worthy of Attention

In recent issues of this paper I have discussed some of the worthy new vines, ground covers and smaller shrubs. Let us now give our attention to some of the medium-size shrubs, those ranging from six to ten feet in height. The shrubs of this group are above the eye level and may be used for screen planting and facing larger shrubs, as well as for specimen plants. As with the other plants, this discussion is prompted by an observation of the plants growing at the Arnold arboretum and in other shrub collections.

In this group of medium-size shrubs there are many new ones of interest. Although many of them are not known outside arboretums, their value warrants their mention. Seed may be procured of some of their types, and specimens of others may be obtained from nurserymen specializing in unusual plants.

Summer-flowering Shrub.

Clethra alnifolia michauxii may well be added to our list of summer-flowering shrubs. Since good summer-flowering shrubs are uncommon, this is a welcome addition. The plant does not differ greatly from the common *Clethra alnifolia*, summer sweet, but it possesses excellent foliage and fragrant flowers. At the Arnold arboretum it was in full flower July 23, while the buds of *Clethra alnifolia* were still closed. The specimen studied was about six feet high and had a spread of eight feet. While I have no information regarding it, this variety probably prefers an acid soil, such as is provided summer sweet, for best results. A plant of compact habit, it should make a satisfactory specimen especially valued for its fragrant, white flowers in July.

Since I have already discussed the cotoneasters in a previous article, may it suffice here to say that among those in this size group worthy of extensive use are *Cotoneaster Dielsiana*, *divaricata*, *hupehensis*, *integerrima*, *multiflora*, *multiflora calocarpa*, *rotundifolia* and *Zabelii*. All these species have red fruits.

Dirca palustris, leatherwood, is a native shrub seldom seen in nurseries, although it has many characteristics possessed by satisfactory shrubs. The roundish leaves, about two inches long, are light green above and lighter beneath. They are borne on flexible twigs that are difficult to break. The plant is free from insect pests and diseases, but it is rather difficult to transplant. Of slow growth, the specimen at the arboretum had reached a height of about seven feet and a spread of nearly eighteen feet. The small yellow flowers, coming in March and April, are quite effective.

Worthy of Greater Use.

Evonymus alatus, the winged evonymus, may exceed the height limit of this group. It is so well known that it needs little discussion. Although somewhat slow to develop its ultimate shape and habit, it is, nevertheless, one of our best ornamental shrubs. While its flowers are so small they attract little attention, the orange red aril of the fruits

is attractive in the fall. The fall foliage, red to scarlet, is among the most brilliant of our autumnal colors. Coupled with these characteristics, the horizontal-branching habit and corky twigs enhance its value. One specimen at the Arnold arboretum was approximately eight feet high and had a spread of twenty feet. As this shrub is compact when well grown, few deciduous shrubs are more beautiful as specimens. There is at present in the trade a dwarf variety of this plant known as *compacta*. Of somewhat smaller size than the species, it is roundish in form and more compact. It is a worthy addition to our compact, formal plants.

Hamamelis vernalis, vernal witch-hazel, though rather common in the trade, is well worthy of greater attention. Blooming in winter, January to March, with yellow, fragrant flowers, this species, native of Missouri to Louisiana and Oklahoma, is hardy to northern Ohio and central New York. It may reach ten feet in height and twenty feet in spread, making an excellent mass planting. It is compact and holds its branches well to the ground.

Neillia sinensis, tube neilla, is a graceful, spreading shrub of about six feet in height, with light green leaves, about two inches in length, bearing drooping pinkish clusters of flowers in May. It may well be used as a specimen plant where it is hardy. While supposed to be relatively hardy, it froze nearly to the ground at the Arnold arboretum last winter.

Physocarpus intermedius parvifolius differs from the common ninebark, *Physocarpus opulifolius*, by its more compact, upright habit of growth and smaller leaf, of less than an inch in length. This plant may be used for facing larger shrubs in border plantings. The species is native in the northern states and perfectly hardy. If it does as well in dry situations as the common ninebark, it should make an excellent shrub for highway planting.

The reddish zigzag branches of the cutleaf *Stephanandra*, *Stephanandra flexuosa*, are attractive, but because the plant is somewhat tender, it finds limited use. *Stephanandra Tanakæ*, yeddo *Stephanandra*, also somewhat tender, is larger and more vigorous in its habit of growth. The leaves are larger and coarse, somewhat resembling those of *rhodotypus*. The bright yellow or reddish fall foliage color is one of the outstanding characteristics of this plant. It should be used in mass plantings with other shrubs.

Viburnums Valuable.

Considering their ultimate height, few of the viburnums belong in this size group. Some of the species such as the withe-rod, *Viburnum cassinoides*, and arrowwood, *Viburnum dentatum*, usually considered of size belonging in this group, do become larger at maturity and will be considered in a later article. The viburnums are such an interesting and valuable genus of plants that nurserymen and landscape gardeners can hardly go wrong on a choice of any of them.

Within this size group might be mentioned *V. affine* and its variety *hypomalacum*, *V. scabrellum* and *V. erosum*. The first three are of much the same appearance as *V. dentatum*, with some variations in the shape of the leaves and branching habit; all bear bluish black fruits. *V. erosum* is much like *V. dilatatum* in habit of growth and leaf and bears red fruits. Since red-fruiting shrubs of this size are not common, this species is a welcome addition.

Xolisma mariana, also known as *Pieris mariana* and *Lyonia mariana*, the stag-bush, is an interesting deciduous ericaceous plant, with bluish green leaves resembling those of *andromeda* in size and shape. This plant has attractive foliage and a good habit of growth and produces many pinkish white flowers in drooping clusters in May and June. It may be used as a specimen plant, in combination with broadleaf evergreens or massed as facing material for larger shrubs. It is native from Rhode Island south.

Thus, within this group, there are new plants suitable for various conditions and uses. Those of most value, because of their flowers, are *clethra*, *dirca*, *hamamelis*, *neilla* and *xolisma*. Those valued for their attractive fruit are the cotoneasters, *Evonymus alatus* and the *viburnums*. Most attractive from the standpoint of fall foliage color are some of the cotoneasters, *dirca*, *Evonymus alatus* and *Stephanandra*. Those most suitable for use as specimens include *clethra*, *cotoneaster*, *dirca*, *evonymus*, *hamamelis*, *neilla*, *viburnum* and *xolisma*. Among those suitable for massing for screens and border planting or for facing large shrubs are some of the cotoneasters, *dirca*, *hamamelis*, *physocarpus*, *Stephanandra*, *viburnum* and *xolisma*.

SANDY SOIL SUGGESTIONS.

Methods of conditioning the better grades of sandy soil to a state of profitable productivity are described in a recent 42-page illustrated bulletin of the Michigan State College agricultural experiment station. The authors are G. M. Grantham and C. E. Millar, and the suggestions are said to represent the result of seventeen years of experimental work, observation and contact with growers handling sandy soil in Michigan.

Among the recommendations are the following: (1) In order to conserve soil humus and reduce the cost of operation, keep sandy soils compact, plowing and tilling as little as consistent with good seed bed preparation and proper weed control. (2) Arrange rotation of crops to include legumes and use green manuring and cover crops in order to maintain the humus and nitrogen content of the soil and to reduce the loss of plant food by leaching. (3) Use commercial fertilizers to balance the food content of the manure so that the crops are adequately and properly fertilized. (4) Use marl, limestone or other forms of lime on sour soils to increase the efficiency of manure and commercial fertilizers and to increase the yield of the most commonly grown crops.

OBITUARY

Alvin E. Nelson.

Alvin Emmanuel Nelson, vice-president of the Swain Nelson & Sons Co., nursery and landscape gardening firm of Glenview, Ill., died October 17.

Mr. Nelson was born at Chicago September 27, 1867, a son of Swain and Sophie Nelson. He was educated in the schools of the Academy of the New Church (Swedenborgian), becoming a member of that church and serving in the councils of the church and the academy, and trained in landscape gardening by his father, who was designer of the first plan for Lincoln park, Chicago. When the Swain Nelson & Sons Co. was incorporated in 1904, Alvin E. Nelson was made treasurer of the company, and at his father's death, in 1917, he became vice-president, remaining active in the conduct of the business until about six months ago.

Mr. Nelson moved to Glenview in 1893 and he participated in civic affairs, especially in the promotion of the Civic building, the library and the park. He was active in both the American Association of Nurserymen and the Illinois State Nurserymen's Association, filling posts in both organizations. He was a member of the Hamilton Club, Chicago, and the Illinois Manufacturers' Association.

Mr. Nelson is survived by his widow, Helen F., and their seven children, Gertrude, Dorothy, Lois, Eunice, Herbert and Gerald, all of Glenview, and Mrs. Beatrice Synnestvedt, Philadelphia.

William H. Doyle.

William H. Doyle, nurseryman of Berwyn, Pa., died October 13, at his home there, after an attack of heart disease. About the time Mr. Doyle died, a son, Joseph A. Doyle, unaware of his father's

death, was being married at Havre de Grace, Md., by a brother, the Rev. Anthony A. Doyle, Philadelphia.

Mr. Doyle was born near West Chester, Pa., sixty-eight years ago and was engaged in the nursery and general contracting business at Berwyn for forty years. Mr. Doyle was a charter member of the West Philadelphia council, Knights of Columbus, and until about a year ago a director of the Berwyn National bank.

Mr. Doyle's wife died last May. He is survived by their seven sons and three daughters, by five nieces and nephews they adopted, by two brothers and by a sister.

LINK PLANTING AND HOUSING.

Swain Nelson & Sons Co., Glenview, Ill., assisted a number of contractors and manufacturers of building materials in a demonstration of the rapid renovation of a house at the grounds of A Century of Progress October 24.

Under a plan sponsored by the Chicago housing commission to promote the better housing plan of the federal government, two 100-year-old buildings were transported to the fairgrounds and there one was remodeled in a day's time from a dilapidated structure, scarcely usable as a habitation, to a modern, desirable residence. The second building was left alongside as a contrast. An important part of the enhancing measures for the renovated structure was the landscaping about the dooryard and foundations, which Swain Nelson & Sons Co. accomplished effectively with groups of evergreens, including chiefly arbor-vitae and junipers.

OREGON ROSE CROP.

According to reports from the section, roses will be ready to dig the first part of November in Oregon. Frost arrived early in the state, and recent rains aided. Rose production there is said to be under what it was in the 1932-33 season, and most nurseries are well sold up on their supplies. The quality of the plants is reported to be fine. Shipments east are expected to start about December 1. Of the thirty-five cars it is estimated will be loaded, a majority will go east of the Rocky mountains.

Quantities of fruit tree stocks are also grown in Oregon, and the growth of these is said to be excellent, recent frosts maturing them in fine shape. A shortage on apple and pear stocks is expected, but other varieties will be sufficient for the demands. Flowering trees and shrubs, as well as maples, are plentiful enough to meet the calls from the east.

ROSE FIRM BUILDS.

Peterson & Dering, specializing in field-grown roses for the trade, which last spring moved from Portland to Seapoose, Ore., is constructing a new warehouse for rose storage. Built along a spur of the main track of the S. P. & S. railroad, the addition will be up-to-date in every respect, incorporating the best features of twelve other warehouses, it is stated. The building, to be completed by November 15, is 50x50 feet, with a 12-foot basement. An upstairs packing room is planned, with an elevator to carry the roses up from the storage quarters. A second unit of

AMERICAN NURSERYMAN

the same size is scheduled for next fall.

E. "Mike" Dering, of the firm, is also secretary-treasurer of the Oregon Association of Nurserymen. Mr. and Mrs. Dering are now rejoicing over the recent arrival of a son, Pat, who may be another rose salesman in about twenty-five years, according to his father.

ELM DISEASE IN INDIANA.

The Dutch elm disease is reported from Indianapolis, Ind. Specimens of four trees were collected near a veneer factory, which had previously imported elm logs from Europe. These specimens, when cultured at the Dutch elm disease laboratory at Morristown, N. J., yielded the fungus known to be the cause of this disease. These trees have been destroyed, but results of later, more thorough scouting have not been released.

Up to October 10, 1934, a total of 7,432 elms have been located in this country as follows: New Jersey, 4,940; New York, 2,420; Connecticut, 56; Ohio, 11; Indiana, 4, and Maryland, 1.

PRISON CONTRACT ILLEGAL.

A contract under which the state of Washington furnished prison labor in exchange for nursery stock was held by Assistant Attorney-general George Downer October 18 to have been executed in violation of the constitution and legislative enactments.

The contract was entered into in March, 1934, by Olaf L. Olsen, director of the department of business control, and the Mountain Meadow Nursery, adjoining the state reformatory at Monroe. In an opinion for Mr. Olsen, Attorney-general Downer held the contract to be null and void.

Under its terms, inmates of the reformatory were used by the nursery company, the state receiving ornamental trees, shrubs and plants in exchange for labor performed on the private property of the nursery.

The nursery stock obtained by the state was distributed to various state institutions and used for beautification purposes.

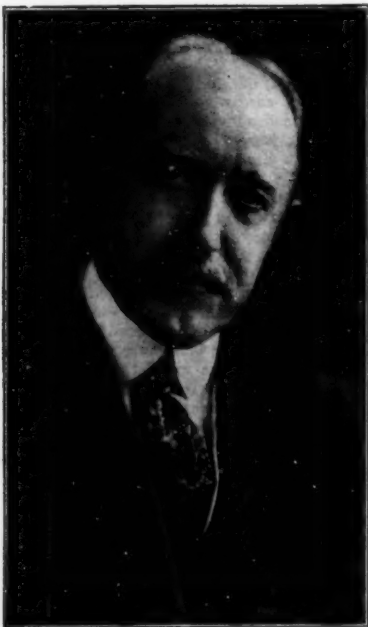
Since the contract was executed the state has received nursery stock in exchange for labor performed by fifteen reformatory inmates, Mr. Olsen said.

Several months after the contract was entered into, a group of nurserymen protested to Gov. Clarence D. Martin and Mr. Olsen, on the ground they were being discriminated against.

On the strength of Attorney-general Downer's opinion, the contract will be abandoned, Mr. Olsen said.

BUSINESS EMBARRASMENTS.

Amawalk, N. Y.—Amawalk Nurseries, Inc., was subject to proceedings in involuntary bankruptcy last week under a petition filed by creditors, to effect a reorganization under section 77b of the bankruptcy law. The petition was approved by the presiding judge, and J. Clifford McChristie was appointed temporary trustee. The business had been operated since May, 1933, under the supervision of a creditors' committee. The property of the firm was appraised recently at \$550,000 and is subject to mortgages amounting to \$260,000. It is stated there are additional liabilities of about \$100,000.



Alvin E. Nelson.

Shade Tree Insects and Their Control

J. S. Houser, Chief of Department of Entomology at Ohio Agricultural Experiment Station, Discusses Midwest Conditions

There is little in common between the middle west and east in so far as degree of damage to trees by insect pests is concerned. Such outstanding pests as the gypsy moth, *Porthetria dispar*; the brown-tail moth, *Nygmia phaeorrhæa*; the satin moth, *Stilpnotia salicis*; the leopard moth, *Zeuzera pyrina*; the Japanese beetle, *Popillia japonica*; the imported birch leaf miner, *Fenusa pumila*; the imported willow leaf beetle, *Plagiodera versicolora*; the two scolytids known to be responsible for spreading the Dutch elm disease, *Scolytus multistriatus* and *Scolytus scolytus*, and others are not present in the westerly area. Without this group of serious tree pests, the control of tree insects in the middle western states is a simple matter when compared with the complicated and infinitely more acute situation in the east.

Moreover, the insects which occur in the middle west are, for the most part, native pests or introduced pests of long standing; hence a large complement of natural control agencies has evolved. Outbreaks are, as a rule, sporadic, although there are exceptions, and if but a little artificial aid is given these natural controls during periods of affluence of the host insect, a satisfactory degree of freedom from significant damage may be enjoyed. However, I do not intend to convey the impression that the application of artificial control measures is not needed, for the exact reverse is meant under certain conditions.

Have Pests in Common.

Of the destructive species which are of common occurrence in the two areas, there may be mentioned the white-marked tussock moth, *Hemerocampa leucostigma*; the elm leaf beetle, *Galerucella xanthomelena*; the fall webworm, *Hyphantria textor*; the cankerworms, *Palaeocrita vernata* and *Alsophila pomataria*; the European pine-shoot moth, *Evtria buoliana*; several species of scale insects and aphids; the conifer red spider, *Paratetranychus ununguis*, and a few others. A few may be listed as more destructive and abundant in the western area, as, for example, the cottony maple scale, *Pulvinaria vitis*; the European elm scale, *Gossyparia spuria*; the burr oak kermes, *Kermes pubescens*; the catalpa sphinx, *Ceratonia catalpæ*, and the locust hispa, *Chalepus dorsalis*.

Obviously it is impossible to deal specifically at this time with each of the insect pests found in the midwestern states; moreover, much of this information is already in print and available to those who require it. It would seem better, therefore, to trend this discussion from this point on to a consideration of some general principles which seem worth while.

Chance for Control Unique.

In the first place, the comparative scarcity of large numbers of species of destructive shade tree pests in the midwest should be capitalized to the extent that, paradoxical as it may seem, insect control be given greater emphasis than it now receives from many of the com-

mercial operators. It has been pointed out that this area possesses a great natural advantage over the east. Thus, a little artificial aid given trees in pest control could be made to pay large dividends in continuing comparative freedom from insect damage.

I realize, of course, that the demand for work in insect control on the part of owners is not great in this general area and that operators may be justified in hesitating to buy the necessary equipment, lest there be too little return on the investment.

It is possible that some of the arborists operating in the middle western area have an erroneous idea relative to the equipment needed. It may be that they have visited the east, where ultra high-power and expensive machines are required for efficiency, and have been appalled at the thought of such a heavy initial expenditure. It is my belief that a less elaborate type of machine might satisfactorily serve the needs of the conditions of the middle west, where it is rarely necessary to treat extensive areas of large trees. A highly motile unit of fair capacity would seem better adapted for use in smaller areas somewhat separated. Moreover, if the sprayer unit is removable from the truck on which it is mounted, thus rendering the latter available for other purposes during non-spraying seasons of the year, the investment may be still further reduced.

Stressing Insect Control.

I am wondering if insect control has not been too little emphasized by the arborists of the middle west in discussing with prospective customers the various needs for work on their premises.

An instance of an unnoticed opportunity of this sort came to my attention three years ago, when I was approached by a group from a city outside of Ohio in connection with a serious infestation of burr oak kermes in post oak. Hundreds of trees in a beautiful section of a city were in a serious condition from this pest, yet very little spraying was being done. The small amount of work under way was not effective, largely because too little spray material per tree had been used. As a result of the partial failure to control the pest, the persons who had sprayed were discouraged because they believed the insect was not amenable to treatment by spraying. When they were assured that oil applied during the dormant period would control the insect and that the only thing needed was an adequate quantity of material applied at the proper time, some persons were encouraged to have further work done the following year, which resulted satisfactorily.

It seemed clear that an excellent opportunity had been missed and that both householders and commercial operators would have profited had a more aggressive policy been pursued by the latter in pointing out the need for the application of control measures.

In a city still farther west, with which I am personally familiar, cankerworms for several years have wrought havoc with the beautiful elms which predomi-

nate as shade trees. The trees are not too large for effective treatment with no more elaborate apparatus than standard orchard-spraying equipment, and I am certain that a fine opportunity exists for some one to start to demonstrate in a few places what could be done.

Know Insects and Control Measures.

Perhaps one reason that insect control has not been followed so closely as it might have been is the fact that this phase of the arborist's program requires more detailed information on his part than do some of the other lines in which he is engaged. Not only does it involve the possession of knowledge of the insect pests themselves, but he must keep abreast with the rapid developments that occur each year in insecticide improvement, and finally he must know the effect of a given insecticide upon the trees that have been placed in his care.

Appropos of this last point, I saw some months ago an example where proper cognizance had not been taken of reaction of the host to treatment. A dormant oil had been applied to several valuable trees in the fall of the year. Under the particular conditions existing at that time, the result was disastrous and several replacements were necessary.

The foregoing instance is given to stress the need of a sound understanding of tree spraying before such is attempted. Incidentally it may be said that under conditions which prevail in the midwestern states, it is never safe to apply dormant oils in the fall of the year. The most favorable time, both from the standpoint of efficiency in insect control and of safety to plants, is in the spring when the buds are swelling.

Have Specific Reason for Control.

While considerable emphasis has been placed in the preceding statements on the advisability of adopting a more aggressive policy in insect control, it should be pointed out that unless a definite need exists, repressive measures should not be applied. I refer, of course, to the practice which is sometimes followed of spraying all the trees on a property as a general clean-up measure. Invariably some danger to the host attends the application of practically every known spraying material. Thus it all too frequently happens that the work proves worse than useless.

The final item I wish to discuss is the desirability of keeping notes on work performed. Indeed, it is more than desirable; it is essential that this be done if the greatest degree of success is to be attained. The system need be neither involved nor burdensome. A simple card arrangement would suffice, which should include date, location, species of host and insect, formula used, quantity of spray applied and temperature at the time the work was done. Records of this type not only would be of great value to an arborist in intelligently serving his clientele, but might easily serve as a valuable source of scientific information for use in advancing the profession as a whole.

Herbaceous Perennials

C. W. Wood Comments on Less Common Varieties of Hardy Plants Deserving Attention

TOWNSENDIAS.

The garden world's prejudice against composites in general and particularly against perennial composites has robbed us of a number of good plants in the genus townsendia. The genus was named in honor of David Townsend, an early student of native flora, and consists of about twenty species, few of which have found their way into gardens. All that I have had are low-growing, some being almost stemless, and while a few are annuals and of no interest to the grower of hardy plants, the following kinds are of value alike to the garden maker and plant grower:

Townsendia exscapa is practically stemless, its pale green linear leaves being surmounted by large pinkish or sometimes white daisies during April and May. The whole plant is not over two inches high and is a reliable perennial if it is given a lean diet and good drainage. The entire genus, so far as I know it, wants the same treatment, a rich soil producing a luxuriance of growth which exhausts the plant after one season of flowering.

The least desirable of the lot as well as the best known is *T. grandiflora*. The colors (lilac to blue) are good and the height of the plant (eight to fifteen inches in my garden) is neither too tall for the rock garden nor too low for the border, the main objection, in my experience, being its proneness to flop. And another feature, its taproot, which makes transplanting difficult, is of some concern to the plant grower.

There seems to be some difference of opinion regarding *T. sericea*, some authorities denying it a place as a distinct species. And I am not sure that I have ever had the plant to match its description. The ones I had were smaller even than *T. exscapa*, being about half the size of that plant, the leaves silvery and the flowers small white daisies.

The gem of the race so far as I have gone is *T. Wilcoxiana*. It is a small stemless plant with its spatulate leaves in small rosettes and its half-inch yellow flower heads resting on the foliage. Its desire for a dry meager soil should not be hard to meet in most eastern gardens. Propagation is from seeds, which I have found best planted in an outdoor frame in late autumn.

GERANIUM PYLZOWIANUM.

It seems necessary for most gardeners to cultivate a taste for geraniums as a whole, though a few, *Geranium sanguineum lanceastrisense* and the subject of our sketch, *G. Pylzowianum*, for example, are sufficiently outstanding to demand immediate attention. *G. Pylzowianum* is one of Reginald Farrer's discoveries and according to his own estimate one of his best. It comes from northern Tibet, a fact which establishes its hardiness, and its deciduous habit makes it easy to protect if the situation is unduly exposed. Taken as a whole, the plant is sparsely clothed, the much divided leaves appearing at irregular intervals, and from these spring short stems each bearing two rosy flowers on long pedi-

cels, the entire plant being from six to ten inches high at flowering time. It is a restrained creeper, growing from small tuberous roots, a fact which suggests the best method of propagation.

SORBARIA.

The genus sorbaria, so named because of the similarity of its foliage to that of sorbus, the mountain ash, is an important group of summer-flowering shrubs that should be used more than they are at present. We of the cold north cannot enjoy all of them, *Sorbaria Aitchisonii* being much too tender, while species such as *S. arborea* and *S. asurgens* are hardy only in protected places. In *S. sorbifolia*, however, we have a 3-foot to 5-foot shrub with showy panicles of white flowers in June and July that is a worthy addition to any shrub border and one that is hardy enough for most climates found in our northern states. In more temperate sections, a selection of the six best known species would give bloom from June to late August or early September. Propagation is readily accomplished by means of hardwood or root cuttings, as in the case of spiraea, a closely related genus, and by seedage.

DELPHINIUM TAITSIENSE.

One of the big voids in the average rock garden planting is an accent plant with a cool blue color that will bloom during the trying summer months. Some of the campanulas answer the quest so far as color and blooming time are concerned, but none that I have grown have the growth habit to permit them to fill the role of accent. The best thing that I have found so far, and a plant of great merit from every angle, is *Delphinium taitsiense*. Here we find a plant clothed in deep dull green leaves of characteristic delphinium shape which sends up 12-inch to 18-inch flower stems carrying a profusion of deep velvety blue flowers. The usual description of the species ascribes to it flowers of sky-blue, which would be a few shades lighter than they really are, according to my judgment of colors. Be that as it may, the flowers are a lovely color, just right for the months which they adorn. Another feature of the plant not to be overlooked in weighing its garden value is its long period of flowering.

In my garden in north Michigan, during the past three or four years, it has bloomed consistently from June until September, provided seeds are not allowed to form and provided the plant does not suffer for moisture.

The plant has been an easy doer here in any sunny situation that is not too dry and has been a good grower under field culture despite a lot of dry weather. *Delphinium taitsiense* has been able to go through one of the severest winters we have ever had, so should be good for the coldest parts of the country.

This species should be of interest to plant breeders, for it undoubtedly contains qualities which would be helpful in arriving at the near perfect rock garden delphinium, which is the dream of every rock gardener. It has been used with *D. elatum* by Lemoine, of France, in producing the variety *Libellule* and others, which are having much popularity in Europe as bedding plants.

An estimate of the species, so far as my experience goes, would place it near the top of the medium high growers. *D. decorum*, of California, has a better color, but the plant is not hardy here in Michigan and its season of bloom is much shorter, though it does come in early spring when flowers are appreciated by the color-hungry gardener. Another one, *D. grandiflorum cinerarium*, has not been with me long enough for me to form a critical appraisal of it, but its first year's performance has been encouraging. The plant is low (never over ten or twelve inches so far) and its turquoise blue flowers are abundantly produced during July. There is a big future for these small delphiniums, for

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they serve numberless purposes around the garden, and that plant breeder is fortunate who can put an outstanding variety on the market during the next few years.

COMMELINA CRISPA.

Generally speaking, commelina is of little consequence in the hardy garden, most of the hundred or more species which are of ornamental value being subjects for the grower under glass. A few worth-while species have, however, extended their range into the temperate zone and are fit material for the grower of hardy plants. Of the latter, *Commelina crispa*, an inhabitant of the southwestern plains states, is a worthy subject. Its procumbent stems are clothed in small lanceolate leaves and the small blue spiderwort flowers are produced in abundance throughout the summer. *C. crispa* does well in any light soil in sun or shade and may be propagated by seeds, when available, or by cuttings, which are easily rooted at any time.

DRABA RAMOSISSIMA.

The average gardener little realizes the vast quantity of good garden material to be found among the 150 or more species of draba which are distributed throughout the temperate and arctic regions of the world. And many gardeners are likely to remain in ignorance unless plant growers search out the good drabas and show them to their customers. Foreign species seem to have fared better at the hands of gardeners than have our native ones. This probably accounts for the fact that *D. ramosissima*, a plant of the Allegheny mountains, still remains an unknown quantity in the horticultural world. Its low mats are made up of hairy leaves, which gives the plant a grayish appearance, the white flowers coming in much branched (the specific name *ramosissima* evidently referring to this characteristic) racemes over a long period in spring. *D. ramosissima* is good in either sun or light shade, preferably the latter, and may be grown from seeds or divisions.

CORYPHANTHA VIVIPARA.

The present popularity of cacti and other succulents, including both tender and hardy kinds, gives the grower of hardy plants a rare opportunity to get into one uncrowded field. To be sure, he will not have the wide range of choice which the grower of tender plants has, but his field will be far wider than is generally supposed and will include some really ornamental material.

It is not necessary to look any farther than *Coryphantha vivipara* (*Mammillaria vivipara*, according to the older classification), a common plains species, ranging from Canada to Colorado, for a good point of departure upon the sea of hardy cactus culture. This plant is not only easy to handle, but it is a good garden ornament as well. It is of low globose habit, clothed in brownish purple spines, the flowers being pinkish purple and more than an inch across.

For large-scale production, it is probably best to grow your cacti from seeds. Complicated schedules for the handling of seeds and seedlings have been published, leading one to believe that the procedure is fraught with danger on all

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DERRY, N. H.

sides, damping off, slow growth and winter injury being among the numerous hazards one is told to look out for. As a matter of fact, growing most of the hardy cacti from seeds is no more difficult than growing many of the items handled in the hardy plant nursery and calls for little more equipment. It is, to be sure, a slow process to get specimen plants of most species, but the price which a nursery-grown plant that is well done will command compensates for the length of time taken in the growing.

A most important factor in any process of growing cacti from seeds is to start with a product which has been well ripened on the plant and has later been thoroughly dried. Such seeds of most species should germinate within two weeks if they are planted in late spring; indoors in winter it will take much longer. Some growers like to start the seeds in pots, but this calls for

transplanting the plants while they are small or carrying them over the first winter in pots, a matter that will call for glass accommodations in most cases. My own preference is for elevated frames filled to the top with light soil and about half an inch of pure sand scattered over the seeds after they are lightly pressed into the surface of the bed. Such a frame with that kind of soil mixture and the covering of sand gives perfect drainage and a noncaking surface in which the plants can remain during their first year of growth.

H. L. BAAKE and T. L. Pitts are now operating the two former Baake nurseries in the vicinity of Los Angeles, Cal., as two separate establishments. Mr. Pitts having taken over the nursery at 7700 Beverly boulevard, Los Angeles, and Mr. Baake taking over the home place on Sawtelle boulevard, south of Sawtelle, Cal.

The Current Season

W. N. Craig's Notes from New England

THE PASSING SEASON.

Late October found Boston still without a killing frost, although in sections inland, removed from the influence of the Atlantic ocean, many tender plants were wiped out weeks ago. It was a moist month, but with much more sunshine than September. Flowers on hardy perennials are still plentiful. Of course the great chrysanthemum army is now in its glory, blooming later than usual due to the dark, warm and moist weather in September, but the general quality is good. *C. coreanum*, which did not winterkill even without covering, is a useful subject in the garden and is admirable for cutting. The newer hybrids are good, but proved scarcely as hardy as *coreanum*; they give a fine range of colors, requiring, however, more pinching than the true chrysanthemums to keep them shapely.

The Japanese anemones, 5 feet high, were still flowering freely October 25, as was *Eupatorium celestinum*. The late aconitums, *Asters tataricus*, *Frikartii*, *Charming* and the dwarf *Mauve Cushion* were still good. *Kniphofias* gave a touch of brightness which was especially welcome. There were still good *delphinium* spikes. Iceland poppies were abundant, while there were also flowers on some of the orientale section. *Centranthus ruber* carried plenty of blooms; this is surely one of the longest-season perennials. *Aster hybridus luteus* was of a pure golden yellow color, and even the geums and potentillas were throwing up a second crop of blooms. *Hemerocallis gracilis* carried several good spikes and showed over what a long season this increasingly important family flowers.

Among the lower-growing subjects, the *helianthemums* were still carrying flowers. *Sedum Sieboldii*, last of this large, interesting and badly mixed family, was not at its best until October 24. *Violas* like *Jersey Gem* were flowering well, but *V. Royal Gem* is the finest of this family late in the season. The latter is not so compact a grower as *Jersey Gem*, but outblooms it in the fall. The violets themselves, including *Rosina*, deliciously sweet; single Russian, and *blanda*, are flowering with great freedom; double Russian refuses to flower until spring, however. *Daphne Cneorum* is a woody plant, but often listed and grown with herbaceous perennials and, as usual, gives a fair scattering of flowers on plants which have had the fullest sunshine; plants in shade grow luxuriantly, but bloom disappointingly.

Scabiosa caucasica is hardly a dwarf plant, but it remains the finest long-season perennial for cutting; no other hardy plant will last so well in water. A batch of 9,000 specially selected plants grown from seeds last winter, planted close to the sea, were last week a wonderful sight, many a yard or more in height. Used entirely as cut flowers for the Boston market, these plants were careful selections from House's special strain, which outclasses the ordinary *caucasica* in size of flowers, vigor and richness of colorings. This plant so far has proved intractable for

forcing. Lifted plants which were well rested failed to give good results. Possibly plants well established in boxes might force better. Extra-fine forms of these *scabiosas* can be increased only by divisions or root cuttings. Of course, the bedding *violas* and *pansies* flowered with a great profusion this fall, thanks to the moist September weather.

BERRIED SHRUBS.

Each year the interest in berried shrubs seems to grow both here and abroad. As a supplement to the rich foliage carried by many shrubs at present, the fruits are a wonderful asset. Prominent both now and later are the various *barberries*; the evergreen section was badly killed last winter, but came back strongly. Apart from its being rather overplanted, the common *Berberis Thunbergii* is attractive with its brilliant foliage, while its fruit persists for months. *B. vulgaris* is superb, where it has a chance to show itself, and really outclasses all other red forms. *B. triacanthophora* makes an attractive shrub with black fruit. This is an evergreen variety. *B. Vernae* is well known, and its yellow flowers give place to coral-red fruits, which are abundantly borne. Somewhat resembling holly in its foliage is the evergreen form, *verruculosa*; the fruits here are black. *B. Thunbergii atropurpurea* in full sun colored up well.

Everyone does not know the big handsome plum-like fruits on the white fringe, *Chionanthus virginica*, which, however, the birds soon dispose of; on large plants these fruits are abundantly produced. *Pyraeantha coccinea Lalandii* was cut down badly last winter here, but there is one hardy form which did not suffer at all; the bright orange red fruits are attractive now. In England this plant is much used trained against houses or on walls, and its deep evergreen foliage effectively sets off the fruits, which are especially welcome where the winters are more somber than here. This plant is now being much sought after, and rightly so.

Of course among low-growing fruiting trees there is really nothing to equal the hawthorns, of which there is a great number of varieties. The old *Crataegus Oxyacantha*, or May tree, of Britain is a good subject to plant. The Washington thorn, *C. cordata*, carries brilliant fruits over a long season. The cocksputr thorn makes a wonderful defensive hedge, which neither man nor beast cares to break through; the brilliant fruits last a long time also on this variety. There are many other grand hawthorns, and the tremendous crops of fruits and their richness of colors are among the most striking features in berried plants each fall.

In the *viburnum* family is a wealth of colorings. Nothing is really more striking and lasting than the great bunches of *V. Opulus*, often called the high bush cranberry. *V. americanum* also carries its brilliant fruits much of the winter. Other attractive *viburnums* in fruit are *Lentago*, *dilatatum*, *casinoides* and *Sieboldii*; the fruits on the

AMERICAN NURSERYMAN

last-named are striking, but the birds soon clean these up.

Among the commoner shrubs, *symphoricarpos* is not to be despised. Everyone knows *S. racemosus*, the snowberry, and *vulgaris*, the Indian currant, or coral-berry, but all do not plant *S. Chenaultii*, a hybrid, the best of the family, carrying coral-red fruits. Everyone who has seen the turquoise berry in fruit exclaims over it, yet many have never seen or listed *Symplocos paniculata*, with its beautiful turquoise blue fruits.

Especially near the seashore, the fruits on *Rosa rugosa* are wonderful in size and color, far ahead of what is seen further inland. Now that the foliage is passing the fruits of the deciduous holly, or winterberry, *Ilex verticillata*, are brilliant. Usually classed as a swamp plant, this shrub grows and fruits abundantly in dry ground. At this season, *Evonymus europaeus* is a glorious sight with its rich foliage and its wealth of pinkish fruits, while the brilliant leaves and attractive but rather inconspicuous berries of *E. alatus*, the winged evonymus, or burning bush, never fail to attract. Of course *E. radicans* *vegetus* is a show in itself just now, its orange fruit being borne in wonderful profusion where the plants have plenty of sun.

Cotoneasters can hardly be left out of any list of fruiting shrubs; the evergreen forms suffered badly last winter, while the deciduous ones fared better. The writer still thinks that *C. horizontalis* and its variety *perpusilla* are the most attractive as they certainly are the most popular. *C. racemifolia songarica*, with its spreading branches and coral fruits, is lovely. *C. divaricata* is another attractive red-fruited variety, while *C. foveolata*, with blackish fruits, is distinct.

Callicarpa purpurea, the Chinese beautyberry, with its deep mauve berries, should be in every garden where shrubs for fruiting effects are grown. No other shrub has berries at all like it in color. The *arionias*, both *arbutifolia*, red chokeberry, and *melanocarpa*, black chokeberry, are worth growing; the first-named does best in moist ground, but will be happy where it is dry and will fruit admirably.

W. N. C.

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CATALOGUES RECEIVED.

[In writing for a copy of any of the catalogues reviewed below, please mention that you saw it described in this column of The American Nurseryman.]

Linville Nurseries, Linville, N. C.—Trade list for fall, 1934, and spring, 1935, featuring offers of azaleas, kalmias, rhododendrons, hemlocks and other hardy plants. Collected and nursery-grown material is represented. Azalea Vaseyi is one of the rarer items listed.

Earl E. May Seed Co., Shenandoah, Ia.—A broad-side, illustrated completely in four colors, featuring seasonable bulbous items, perennials, grass seed and other fall-planting items. Prices in this retail circular are given prominent display, as are collections and special quantity offers.

D. M. Andrews, Boulder, Colo.—A 24-page catalogue of new and noteworthy plants at Rockmont Nursery, including flowers for the rock garden, irises, phloxes, seeds, lilies, lilacs, shrubs and hardy cacti. As usual, there are many items not to be found elsewhere. The descriptions are exceedingly helpful, as are a number of illustrations. The style of the catalogue has been changed slightly from former editions, appearing with pages 6x9 inches. Valuable cultural information is incorporated.

Katzenstein & Co., Atlanta, Ga.—A complete list of seeds of conifers, deciduous trees and shrubs, fruit trees, palms and subtropical plants, also lining-out stock and medicinal roots and herbs. Flower seeds are no longer listed, a note states, but can be supplied on request. A collection of tree seeds is a new feature.

Chase Nursery Co., Chase, Ala.—The "Out of the Red" issue of the firm's wholesale list of a complete line of nursery material, including conifers, deciduous trees and shrubs, broad-leaved evergreens, lining-out and potted stock, etc. A number of patented roses are featured, and the other groups of plants also show some outstanding novelties. Supplies are offered on more than a dozen pages.

T. Kiyane, Crichton, Ala.—Wholesale catalogue for fall and spring, including offers on azaleas, camellias, magnolias, broad-leaved evergreens, conifers, deciduous plants, palms, vines, bulbs, etc.; illustrated and clearly printed.

Forest Nursery Co., McMinnville, Tenn.—Fall wholesale price list of evergreens, hardy flowering shrubs, forest and shade trees, forest tree seedlings, hedge plants and vines.

Southern Camellia Gardens, Crichton, Ala.—Fred Rudolph's offers of azaleas and camellias in named varieties, as well as of a few other items in broad-leaved evergreens, coniferous evergreens and flowering shrubs. Priced wholesale.

Gerbing's Azalea Gardens, Amelia City, Va.—A descriptive trade list of brightly-colored and hybrid varieties of caladiums. The firm, it is stated, has grown caladiums for the past twenty years and the present list represents the pick of the hybrids produced during that time. Mention is made of a method of producing bulbs with a maximum of side eyes. Bulbs are offered in three grades.

Naperville Nurseries, Naperville, Ill.—General price list No. 255 for fall, 1934, covering deciduous ornamental trees and shrubs, evergreens, perennials and fruit trees. Many of the tree items are listed as twice-transplanted, the shrub list has many items of special worth and the perennial section is unusually extensive. Views of the nursery are included, and the common name is given with the botanical designation in the lists. Illustrations of the firm's roadside stand decorate the cover. Fifty per cent discount from the list prices is indicated for the trade.

Jackson & Perkins Co., Newark, N. Y.—A broad-side in four colors featuring the firm's best sellers in roses. This is the first presentation of its novelties for the 1935 season and is designed to be used as a wall poster if desired. Twelve patented roses are shown in large illustrations, with the retail price of each.

Fruitland Nurseries, Augusta, Ga.—Fall and spring retail catalogue, covering a complete planting line. Seventy-eight years of service are claimed by this firm, which makes a specialty of camellias among other fine things. A splendid collection of novelties appears among the tree and shrub items. Native plants are offered also. Rose Nigrette decorates the back cover, one of a large collection of roses listed.

Boyd Nursery Co., McMinnville, Tenn.—Wholesale price list of shrub trees, evergreen shrubs and bulbs. The stock is described as thrifty, not overgrown and specially priced. There are a group of collected items, an offer of hardy ferns and a list of shrub and tree seeds to complete the catalogue.

Mount Arbor Nurseries, Shenandoah, Ia.—Fall wholesale trade list, offering a large and complete assortment of general nursery stock, including lining-out grades, perennials, bulbs and aquatic plants. "Sure to Grow" packaged plants for retail sales are featured on the last page.

Donaldson Nurseries, Sparta, Ky.—Wholesale price list. Grouped separately are evergreen trees, broad-leaved evergreens, deciduous shrubs, vines and deciduous trees and roses. A source for some of the leading specialties in each classification mentioned.

Conard-Eyle Co., West Grove, Pa.—Dealers' price list for evergreens, roses, shrubs, vines and hedge plants, with details of the dealer system used by the firm. Rose Luis Brinas, having plant patent No. 102, is given as the leading novelty for 1934.

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SEVEN NEW PLANT PATENTS.

According to Rummler, Rummler & Woodworth, Chicago patent lawyers, seven plant patents—six on roses and one on a barberry—were recently issued, as follows:

No. 104.—Rose. Wilhelm John Hinrich Kordes, Sparrieshoop, Germany, assignor to Henry A. Dreer, Inc., Philadelphia, Pa. A variety of hybrid tea rose characterized particularly by its rich orange, pink and yellowish coloring, the novel curling and bending of its petals, sweet scent and other desirable qualities.

No. 105.—Rose. Wilhelm John Hinrich Kordes, Sparrieshoop, Germany, assignor to Henry A. Dreer, Inc., Philadelphia, Pa. A variety of hybrid tea rose characterized by its gorgeous deep crimson color and velvety petals combined with exceptionally vigorous growing and blooming habits, by freedom from disease and by other desirable qualities.

No. 106.—Rose. Gerrit de Ryter, Hazerswoude, The Netherlands, assignor to Jackson & Perkins Co., Newark, N. Y. A new and distinct variety of rose plant characterized by its rampant climbing habit and the orange scarlet color of its bloom.

No. 107.—Rose. Matthias Leenders, Teyl, The Netherlands, assignor to Jackson & Perkins Co., Newark, N. Y. A new and distinct variety of rose plant of the hybrid polyantha class, characterized by the wavy or fluted formation of the petals of its flower and the contrasting inside and outside colors of the petals.

No. 108.—Rose. Victor Lens, Wavre Notre Dame, Belgium, assignor to Jackson & Perkins Co., Newark, N. Y. A new and distinct variety of rose plant characterized by its particular adaptation to greenhouse culture for cut flowers, producing evenly and continuously a quantity of blooms of high quality, thereby being of great value to the cut flower florists; by its large size, by the fragrance of its bloom, by its form, by the length of stem and by the white color of its flower.

No. 109.—Rose. Jean H. Nicolas, Newark, N. Y., assignor to Jackson & Perkins Co., Newark, N. Y. A new variety of rose characterized by the distinct chestnut red color of its bud and half-open bloom, gradually changing to carrot-red, with orange suffusion in the full-blown flower, and finishing satiny coral, and by the profusion and continuity of its bloom.

No. 110.—Barberry. Michael H. Horvath, Mentor, O., assignor to the Cole Nursery Co., Palmsville, O. A new and distinct variety of Berberis Thunbergii characterized particularly by its erectness and shapeliness of growth in the absence of trimming, approximating pyramidal form, and the dense growth of its foliage.

BUYERS' GUIDE SUPPLEMENT.

As a guide to the sources of more than 30,000 varieties of plants, bulbs, tubers, etc., "The Plant Buyers' Index," compiled by J. Woodward Manning, which appeared in its third edition in 1931, has been greatly increased in value by the issuance of an extended supplement. The two volumes, identically bound and similarly printed by the planograph process, are now available at the price of the original work, \$10, postpaid.

The only reference book of its kind available, "The Plant Buyers' Index" has constantly grown in importance with the broadening demands of amateur horticulturists and the great increase in material being offered. The imperative need of the 1934 supplement becomes obvious when it is realized that over 7,500 new species and varieties of ornamental plants have entered the American horticultural world since 1931. A record is now provided of the subjects carried by over 450 leading plantmen in the United States, as well as by many specialists who issue no lists or catalogues. More than 125 new sources are given in the supplement.

Trees, shrubs, vines, herbaceous plants, fruits, nuts, bulbs, annuals and cacti are among the groups considered. There are comprehensive alphabetical lists of peonies, roses, gladioli and irises. The cactus section in the supplement is particularly notable, occupying over a score of pages, the nomenclature of Britton and Rose being carefully followed. The succulent group has been revised. Greenhouse orchids are still among the few plant groups omitted. Entries of

seed sources, as begun in the third edition, are continued in the supplement, because of the demand for such material. The publishers are J. W. & E. G. Manning.

DWARF, STANDARD FRUIT TREES.

Can you tell me what the difference is in the time of bearing, quality of the fruit and the amount of bearing between a dwarf apple tree and a standard tree?
J. C. C.—N. Y.

The difference between the time of bearing of a dwarf fruit tree and a standard tree depends greatly upon the variety involved and also upon the type of pruning, care and kind of dwarf stock. In other words, if the Paradise dwarf stock is used, the trees will come into bearing earlier than if the Doucin is used. If the standard tree is not pruned back it will come into bearing quicker than if it is heavily pruned each season.

This year the New York agricultural experiment station, Geneva, had dwarf trees on Paradise roots that bore fruit at the age of 2 years. The same variety if grown as standard would probably not have borne until it was 5 years of age. On the other hand, if one had a variety such as Northern Spy that comes into bearing late in life, there might be a wider difference.

Usually the fruit on the dwarf trees is larger and handsomer than that on the standard. Commercially, however, the standard trees are more favored, as it has been found that the standard trees produce more fruit per acre even though they may be two or three years slower in coming into bearing. This is easily explained, as the standard tree has a much greater bearing surface.

Richard Wellington.

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BEES DON'T STING APPLES.

My attention has been called to an article entitled "Yield at Missouri Orchards," published in the October 15 issue of The American Nurseryman. I wish to correct the last sentence in this article which reads, "During the blooming season, hives of bees are placed throughout the orchards, but the hives are removed before the young apples are large enough for the bees to sting them, causing decayed and deformed fruit."

It has been proved that honey bees are incapable of cutting the skins of fruit. In fact, in experiments honey bees have been placed inside glass jars in which were ripe, round strawberries. The bees starved to death. The bees, no doubt, will suck the juice out of ripe grapes where the skins have been injured by some other insect or cause. They might even work on apples which have been punctured by birds or something else, but they cannot and do not sting apples, as stated in this article. Bees should be removed from the orchard after the blooming period, not because they will do the fruit any harm, but because they may be harmed themselves by the sprays applied on the fruit. Hearty coöperation should exist between

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Maple, in assortment for Parks, Cemeteries, Subdivisions and Landscape Work.
Birch in variety, Hawthorn and other Ornamental and Shade Trees.

FRUIT TREE SEEDLINGS

Ample and Complete Stocks.

Car lot shipments at reasonable freight rates.

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Splendid Stock

Write for Special Quotations

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Buxus suffruticosa and B. sempervirens. Selected uniform plants; bushy and foliated to center; masses of fibrous roots. Finished specimens from 4 inches up, ready for quick shipment. Prices lower, plants larger. Ask for special list.
CANTERBURY NURSERIES, Inc., Box A, Easton, Md.

the beekeeper and the orchardist. The orchardist needs the beekeeper's bees at blooming time and the bees secure some honey flow and pollen from the orchard bloom.

I am sorry that this paragraph appeared, as it is absolutely incorrect, as any entomologist will testify.

R. S. Herrick, Secy.-Treas.,
Iowa Horticultural Society.

FREIGHT RATE FIGHT.

(Concluded from page 6.)

against consolidated freight classifications. The official report on the Washington proceedings made by Mr. La Tourette follows:

Re: Ex Parte 115, Increases in Freight Rates and Charges.

There was a very large attendance at the hearing, and the commission at first insisted that the shippers should put on their testimony at the Washington hearing. I had insisted that this should not be done in view of the very voluminous record made by the carriers and the fact that the shippers should have an opportunity to digest their testimony and prepare exhibits to meet the situations presented by the carriers.

After the third day of the hearing the commission finally agreed to this request and will arrange to set a number of field hearings, the dates and places of which we will receive notice in due time. It was intimated that a hearing will be held at either St. Louis or Chicago.

Believe we won a very important point in this case by having the commission agree to this procedure, as a great hardship would have been worked upon all of the shippers had they been forced to proceed with their case, and it would also have been very expensive to them if they were required to keep their representatives during the lengthy hearing in Washington.

A further suggestion was made that, in consideration of some shippers' not having sufficient financial resources to arrange to send representatives to the field hearings, a form of shortened procedure might be initiated by which interested shippers might submit a statement of facts and arguments, which would be received in evidence by the commission and answered by a similar statement of facts and argument by the carriers. If these two pleadings were filed, the

shippers would then be permitted to offer a statement in rebuttal.

Am of the opinion that the time spent at this hearing means a great deal to the nurserymen, as their interests were fully protected at all times, and in view of the action of the commission in agreeing to field hearings, as well as the shortened procedure mentioned above, a full opportunity will be given our people to make very strenuous opposition to the petition of the carriers.

THOMAS W. THRASHER, formerly of Norfolk, Va., has opened a nursery salesroom at 603 Main street, Danville, Va.

ALBERT C. STEUBER, nurseryman of Snohomish, Wash., is building a greenhouse and will landscape his grounds.

THE week of October 14, Balderson & Co., Washington, D. C., held open house, displaying roses, evergreens and garden plants, with garden implements.

FLORENCE C. BEEVEN, of the Berven Nursery, Centerville, S. D., and Miss Hazel Christensen, Wakonda, S. D., have started a nursery business at Wakonda.

ACCORDING to news stories from Oakland, Cal., two model homes at Britanny Village have been landscaped by Mark Daniels, landscape architect, with stock furnished by the California Nursery Co., Niles, Cal.

BERNARDO OTTOBONI, proprietor of the Colma Pioneer Nursery, Colma, Cal., and one of the pioneer nurserymen of the San Francisco bay region, died October 17. The business will be carried on by Mr. Ottoboni's three sons.

A CONTRACT for the construction of a lawn on the grounds about the new post office at Salem, Mass., has been awarded to the North Shore Nursery Co., Swampscott, Mass., the work to be done by Pearson Bros., Lynnfield Center, Mass.

THE northern California district of the American Rose Society held its annual convention October 7, at an old adobe building on the grounds of the California Nursery Co., Niles, Cal. The old structure was the home of Don Jesus Vallejo, founder of Niles.

EAST Texas and the city of Tyler particularly were hosts to visitors from twenty-six states at the second annual east Texas rose festival October 11 and 12. J. H. Nicolas, Robert Pyle and J. Horace McFarland, all well known eastern rose enthusiasts, were present at the festival and proclaimed it a most successful event. Texas roses are gaining merited recognition after many years.

ACCEPTING the jury of view award of damages to the Hoopes Bros. & Thomas Co., operating the West Chester Nurseries, West Chester, Pa., the borough council the evening of October 10 ordered immediate payment of \$23,250 to the nursery firm. The nursery has waived its claim to interest on the award and will make no appeal. The damages are for seventy-eight acres of the nursery holdings taken by the borough for a new reservoir.

POSITION WANTED

Man with excellent education, thoroughly experienced in nursery sales and landscape work and an expert radio speaker, desires position with future. Address No. 4, American Nurseryman, 508 S. Dearborn St., Chicago.

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Highly effective for the prevention of desiccation

Two to three times greater covering power than melted paraffin

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Melcura Aurantiaca Seed (Orange Orange Hedge), wholesale and retail. Export business a specialty. Free samples of seed sent to foreign countries where it is not already introduced.

Ray Wickliffe, Seneca, Kan.

Tree Peony, Banksii. large, double, flesh pink, robust, free-blooming variety. Strong shrubs, own roots, each, \$5.00. Herbaceous Peonies, best varieties.

Oberlin Peony Gardens, Sinking Spring, Pa.

Peonies, 2 to 6 eyes, any variety, any quantity. 5c each; E. Superba, Delicatissima, Grandiflora, Verneville, F. Maxima, C. d'Or, Rachel, F. Crouse, Rubra Superba.

C. H. Smith, Faribault, Minn.

American Elm, 1½ to 6-in. diam.; Moline Elm, 12 to 14 ft.; Chinese Elm, 8 to 10 ft.; Sugar Maple, 1½ to 6-in. diam.; Silver Maple, 2-in. diam.; American Linden. Write for prices.

Elm Grove Nursery, Leesville, Mich.

Hardy Perennials and Rock Garden Plants of over 50 varieties, strong seedlings, also 3 of the world's finest pansy strains at very low price. Send for list.

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Westminster Nursery, Westminster, Md.

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